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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,599	02/28/2002	Gilles Feugnet	220188US2PCT	3584

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EXAMINER

JACKSON, CORNELIUS H

ART UNIT PAPER NUMBER

2828

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/069,599

Applicant(s)

FEUGNET ET AL.

Examiner

Cornelius H. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
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### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 & 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. How one of ordinary skill in the art would go about choosing "at least one of a dimension and a distribution of the dopants" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The invention as claimed is not properly supported by the specification. The specification as stated on pages 7-9 in the section of "Determining the dimensions of the doped zone" teaches the doped zone is chosen based on the laser pumping source and an optical focusing system. Also the specification is silent as to the concentration of the doped zone(s).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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5. Claims 16-26 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the arrangement of the active lasing medium, pumping means and means for coupling is vague in that it is unclear as to relationship of how a plurality of active lasing mediums in a cavity through the means for coupling is coupled to a plurality of pumping means, or how the plurality of active lasing mediums are located with respect to one another, that is, side by side, one behind another, or some combination of the two or how the means for coupling couple a plurality of pumping beams to one or more active lasing medium, that is, whether the plurality of pumping beams are used to pump each medium individually or separately.

6. Claims 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the steps for manufacturing an active medium. The claims fail to give a process wherein one of ordinary skill in the art could follow to form an active medium, since the claims are circulatory in that the method of manufacturing is the same as the method of making. Therefore, "to claim a method for the manufacture of an active medium comprising making one or more pieces of a matrix", is the same as, "to claim a method for making an active medium comprising the manufacture of one or more pieces of a matrix", which is the same as, "to claim a

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method for the manufacture of one or more pieces of a matrix comprising making an active medium", and so on.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 16, 21-30 rejected under 35 U.S.C. 102(b) as being anticipated by Pocholle et al. (5311540). Regarding claim 16, Pocholle et al. disclose a longitudinally pumped laser **Figs. 3, 5, 7 and 8** comprising at least one active lasing medium **12** arranged in an optical cavity; at least one pumping means **LP** emitting at least one pumping beam toward the at least one active lasing medium **12**; means for coupling **24/28** the at least one pumping beam with the at least one active lasing medium **12**, **see col. 3, line 23-col. 4, line37**.

Regarding claim 21, Pocholle et al. disclose the doped zone **12** has a parallelepiped or circular or elliptical shape, **see Figs. 3 and 5**.

Regarding claim 22, Pocholle et al. disclose one or more of the at least one pumping means **LP** comprises one or more diode arrays **22** and the coupling means **24** includes a light concentrator **24a** for receiving all light emitted by the diode arrays, **see Fig. 7**.

Regarding claim 23, Pocholle et al. disclose all the stated limitations, **see Figs. 7 and 8, and col. 6, lines 7-65**.

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Regarding claim 24, Pocholle et al. disclose all the stated limitations, **see col. 4, lines 26-32 as a property of producing.**

Regarding claims 25 and 26, Pocholle et al. disclose all the stated limitations, **see col. 3, lines 42-52.**

Regarding claim 27-29, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, the rejection used against the device, stands for the method as well.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pocholle et al. (5311540). Pocholle et al., as applied to claims 16 and 21-30 above, teach all the stated limitations except for positioning the doped zone centrally or annularly, and the size of the input face of doped zone being smaller than or equal to (or greater than) a section of the fundamental mode.

Regarding claims 17-20, "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

*CHJ*

chj  
June 16, 2003

*Paul Ip*

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